Material Safety Data Sheet

according to ANSI Z400.1-2004

HIGHTEC ANTIFREEZE AN (USA)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

HIGHTEC ANTIFREEZE AN (USA)

Chemical characterization (Mixture)

Details of the supplier of the safety data sheet

Company name:	ROWE MINERALÖLWERK GMBH	
Street:	Borkensteiner Mühle 7	
Place:	D-67308 Bubenheim	
Telephone:	+0049 - (0)6355 9541-0	Telefax: +0049 - (0)6355 9541-41
e-mail:	info@rowe-mineraloel.com	
Internet:	www.rowe-mineraloel.com	
Responsible Department:	Kundenservice	

Emergency telephone: Giftnotruf Mainz (DE; E)

+49 (0)6131-19240

SECTION 2: Hazards identification

Route(s) of Entry

Signs and Symptoms of Exposure

Carcinogenicity (NTP):

Carcinogenicity (IARC):

Carcinogenicity (OSHA):

Other hazards

Vapour and mist concentrations above the allowable levels or unusually high concentrations may cause irritation to the nose and throat as well as headache, nausea and drowsiness.

Brief contact with the product may cause slight skin irritation. Prolonged contact (e.g. through soaked clothing) may result in serious skin irritation with symptoms such as redness and swelling.

Oral ingestion of small amounts causes kidney damage.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

CAS No	Components	Quantity
107-21-1	ethanediol, ethylene glycol	95 - 100 %
532-32-1	Natriumbenzoat	1 - 5 %
12179-04-3	disodium tetraborate pentahydrate; borax pentahydrate	< 1 %

SECTION 4: First aid measures

Description of first aid measures

Indication of any immediate medical attention and special treatment needed

Ethylene glycol poisoning may cause initial symptoms such as behavioral disorders, drowsiness, vomiting, diarrhea, thirst and spasms. Kidney damage and kidney failure along with metabolic acidosis are late poisoning symptoms. Prompt medical treatment complemeted by haemodialysis, if necessary,

can reduce the toxic effect. Intravenous administration of ethanol in a sodium bicarbonate solution is a recognized antidote. For further treatment information, please consult the Poison Control Centre.

SECTION 5: Firefighting measures

Extinguishing media

Special hazards arising from the substance or mixture

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SECTION 6: Accidental release measures

SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling

No special measures required when used in accordance with the instructions.

Conditions for safe storage, including any incompatibilities

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure limits

CAS No	Components	ppm	mg/m³	fib/cc	Category	Origin
12179-04-3	Borates, tetra, sodium salts (Pentahydrate)	-	1		TWA (8 h)	REL

Exposure controls

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state:

Color:

		Test method
pH-Value:	7,2	

Changes in the physical state

Melting point:	-18 °C
Flash point:	115 °C
Density (at 20 °C):	~1,12 g/cm³

SECTION 10: Stability and reactivity

Stability:	Stable
Possibility of Hazardous Reactions:	Will not occur

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

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CAS No	Components				
	Exposure routes	Method	Dose	Species	Source
107-21-1	ethanediol, ethylene glycol				
	oral	LD50	4000 mg/kg		
	dermal	LD50	10600 mg/kg	Kaninchen	GESTIS

Carcinogenic/mutagenic/toxic effects for reproduction

The product is not classified.

Additional information on tests

Oral ingestion of small amounts causes kidney damage.
Contact with the eyes causes eye inflammation.
Inhalation of mists and vapours causes impaired consciousness.

Further information

No special hazards known when the product is properly used and the precautionary measures indicated are observed.

SECTION 12: Ecological information

Persistence and degradability

According to EU criteria: expected to biodegrade fast The product basis (ethylene glycol) itself is readily biodegradable.

SECTION 13: Disposal considerations

Waste treatment methods

Contaminated packaging

Contaminated packaging should be emptied to the maximum possible extent. After appropriate cleaning, it can be routed to reuse. Packaging not amenable to cleaning must be disposed of in accordance with the statutory regulations.

SECTION 14: Transport information

Marine transport (IMDG)

Other applicable information

No dangerous good in sense of this transport regulation.

Air transport (ICAO)

Other applicable information

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

U.S. Regulations

SARA

Section 313 Toxic Release Chemicals
Ethylene glycol (CAS 107-21-1).
Section 313 Toxic Release Chemicals
Ethylene glycol (CAS 107-21-1).

SECTION 16: Other information

Hazardous Materials Information Label (HMIS)

Health:	1
Flammability:	1
Physical Hazard:	0

NFPA Hazard Ratings

Health:	1
Flammability:	1
Reactivity:	0
Unique Hazard:	

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)